

OPINION 618

DYTISCUS CINEREUS LINNAEUS, 1758 (INSECTA, COLEOPTERA);
DESIGNATION OF A NEOTYPE UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers it is hereby directed that the nominal species *Dytiscus cinereus* Linnaeus, 1758, is to be interpreted by reference to the neotype described and illustrated in this Opinion.

(2) The generic name *Graphoderus* Dejean, 1833 (gender : masculine), type-species, by designation by Westwood, 1838, *Dytiscus cinereus* Linnaeus, 1758, is hereby placed on the Official List of Generic Names in Zoology with the Name No. 1453.

(3) The following specific names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified :

(a) *cinereus* Linnaeus, 1758, as published in the binomen *Dytiscus cinereus*, as defined under the plenary powers in (1) above (type-species of *Graphoderus* Dejean, 1833) (Name No. 1774);

(b) *bilineatus* De Geer, 1774, as published in the binomen *Dytiscus bilineatus* (Name No. 1775);

(c) *zonatus* Hoppé, 1795, as published in the binomen *Dytiscus zonatus* (Name No. 1776);

(4) The generic name *Graphoderas* Thomson, 1860 (an incorrect spelling for *Graphoderus* Dejean, 1833) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name No. 1528.

(5) The following specific names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Numbers specified :

(a) *fasciatus* De Geer, 1774, as published in the binomen *Dytiscus fasciatus* (a junior objective synonym of *Dytiscus cinereus* Linnaeus, 1758) (Name No. 676);

(b) *taeniatus* Rossi, 1795, as published in the binomen *Dytiscus taeniatus* (a junior objective synonym of *Dytiscus bilineatus* De Geer, 1774) (Name No. 677).

HISTORY OF THE CASE. (Z.N.(S.) 1389)

The present case was submitted to the Commission's Office on 9 October 1958. It was sent to the printer on 30 October 1959 and was published on 8 April 1960 in *Bull. zool. Nomencl.* 17 : 246-249. Public Notice of the possible use by the Commission of its plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (*Bull. zool. Nomencl.* 4 : 51-56) and to seven entomological serials.

The Secretary to the International Commission received the following comments on Mr. Balfour-Browne's proposals :

Dr. Henning Lemche (28.iv.60): To establish a neotype on a specimen with unknown locality is a procedure that appears to me very unfortunate. The practice of the work of the Commission has to be that of developing the most complete certainty in nomenclature, and there is always uncertainty in the unknown. Is there no possibility of a better choice?

Mr. J. Balfour-Browne (4.v.60), in reply to Dr. Lemche: I can only reply that up to the time of Westwood's selection of *cinereus* L. as type-species of *Graphoderus* the species had only been recorded in Britain from Whittlesey Mere and that to the best of my knowledge and belief is the only known locality for the species in Britain up to the date at which the specimen selected as Neotype was received in the Museum. No other modern British specimen is in the British Museum though some, more precisely provided with data, are in a private collection, known to me. The difficulty there was that the Rules will require the neotype to be located in a public Museum. If the Commission so desires it I would agree to try to obtain one of those specimens for the Museum and, if presented, I would agree to its being cited as neotype with full locality data.

Dr. Per Brinck (11.xi.60): In 1955, I had an opportunity to examine the Linnean dytiscids in the collection of the Linnean Society of London, for the planned Peters's edition of the *Systema Naturae* (1758). As regards *Dytiscus cinereus*, my results agree fully with those presented in Mr. J. Balfour-Browne's communication, paragraphs (2)–(3). The discussion of the facts, however, differs in certain details which will be dealt with below.

As said by Mr. Balfour-Browne (5) the Linnean description (1761) of *cinereus* applies to a species of *Graphoderus*. Linnaeus's short diagnosis (1746, 1758, 1761, etc.) on the other hand, is not sufficient to determine whether the Linnean name *cinereus* should be applied to a species of *Graphoderus* or to the male of *Acilius* (9).

It is well known that Linnaeus distinguished between the diagnosis which should be very short (consist of 8 words at the most and be a sort of key, shortly characterising the various known species of a genus) and the description which should be an elaborate definition of the species (and so could be rather long).

In the 1758 edition of *Systema Naturae* there is a definite reference to the complete description in the first edition of *Fauna Suecica* (1746, p. 182). This is an important reference, since in this particular case the diagnoses in the *Fauna Suecica* (1746 and 1761) and the various editions of *Systema Naturae* are substantially equal, as far as they go. Therefore, it might be justified to regard the reference in *Systema Naturae* 1758 to the description of 1746 as part of the characterisation of the species. If we accept this procedure, an interpretation of the Linnean name as covering a species of *Graphoderus* is justified.

Personally I do not think that Linnaeus distinguished between the species of *Graphoderus* and the male *Acilius*. On the contrary. But it might well be that, when preparing the first description of *D. cinereus* in 1746, he had a specimen of *Graphoderus* before him.



neotype
selected.
J. Balfour-Browne
vi. 1960.

Catfield
9 VII. 1945
C. sinensis

1960-340

